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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---|-----------------------------|-----------------------|---------------------|-------------------------|--|
| 10/707,878 | 01/20/2004 | Ashima B. Chakravarti | FIS920030317US1 | 1877 | |
| 32074 75 | 90 10/27/2006 | | EXAMI | NER | |
| INTERNATIONAL BUSINESS MACHINES CORPORATION | | | SMITH, BRADLEY | | |
| DEPT. 18G BLDG. 300-482 | | | ART UNIT | PAPER NUMBER | |
| 2070 ROUTE 52 ` | | | 2891 | | |
| | HOPEWELL JUNCTION, NY 12533 | | | DATE MAILED: 10/27/2006 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | |
|--|--|--|--|--|--|
| | 10/707,878 | CHAKRAVARTI ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Bradley K. Smith | 2891 | | | |
| The MAILING DATE of this communication appeared for Reply | pears on the cover sheet w | ith the correspondence address | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNI 136(a). In no event, however, may a will apply and will expire SIX (6) MOI e, cause the application to become A | CATION. reply be timely filed NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133). | | | |
| Status | | | | | |
| 1) Responsive to communication(s) filed on 25 J | <u>uly 2006</u> . | | | | |
| 2a)⊠ This action is FINAL . 2b)□ This action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under E | Ex parte Quayle, 1935 C. | D. 11, 453 O.G. 213. | | | |
| Disposition of Claims | | | | | |
| 4)⊠ Claim(s) <u>1-20</u> is/are pending in the application | | | | | |
| 4a) Of the above claim(s) <u>18-20</u> is/are withdray | | | | | |
| 5) Claim(s) is/are allowed. | | | | | |
| 6)⊠ Claim(s) <u>1,2,4,5,7 and 8</u> is/are rejected. | | | | | |
| 7)⊠ Claim(s) <u>3,6 and 9-17</u> is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/o | or election requirement. | | | | |
| Application Papers | | | | | |
| 9) The specification is objected to by the Examine | er. | | | | |
| 10)⊠ The drawing(s) filed on <u>1/20/04</u> is/are: a)⊠ ac | | by the Examiner. | | | |
| Applicant may not request that any objection to the | drawing(s) be held in abeya | nce. See 37 CFR 1.85(a). | | | |
| Replacement drawing sheet(s) including the correct | tion is required if the drawing | (s) is objected to. See 37 CFR 1.121(d). | | | |
| 11)☐ The oath or declaration is objected to by the Ex | kaminer. Note the attache | d Office Action or form PTO-152. | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign | priority under 35 U.S.C. | § 119(a)-(d) or (f). | | | |
| a) All b) Some * c) None of: | | | | | |
| 1. Certified copies of the priority document | | anlication No | | | |
| 2. Certified copies of the priority document3. Copies of the certified copies of the priority | | | | | |
| application from the International Bureau | • | received in this National Stage | | | |
| * See the attached detailed Office action for a list | , ,,, | received. | | | |
| | | | | | |
| | | | | | |
| Attachment(s) | | | | | |
| 1) Notice of References Cited (PTO-892) | · — | Summary (PTO-413) | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | —————————————————————————————————————— | s)/Mail Date nformal Patent Application | | | |
| Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 6) Other: <u>sea</u> | | | | |
| U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06) Office Ac | ction Summary | Part of Paper No./Mail Date 20061012 | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4, 5, 7, and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakano et al. Nakano et al. disclose heating said workpiece on a substrate in a vacuum chamber; depositing a layer of silicon on a surface of said workpiece in which said step of heating comprises supplying more than half of a total heating power to a lower surface of said workpiece, whereby said workpiece is maintained at a deposition temperature greater than a crystallization temperature of silicon during the depositing of the layer of silicon (see figure 4 and paragraphs 0039 and 0040). With regards to claim 2, heating power is supplied by an upper set of lamps disposed above said workpiece and a lower set of lamps disposed below said substrate (see figure 1). With regards to claims 4, 5, 7 and 8, Nakano et al. disclose the power rates for the lamps and discloses the deposition of silicon via CVD (figure 4 and paragraphs 0039 and 0040).

Allowable Subject Matter

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Claims 3, 6, 9-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to teach or suggest more than 75% of the power is supplied to the lamps beneath the substrate (claims 3, 6, 9-17).

Response to Arguments

Applicant's arguments, filed 3/23/06, with respect to the rejection(s) of claim(s) 1-17 under 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Nakano et al.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley K. Smith whose telephone number is 571-272-1884. The examiner can normally be reached on 10-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Baumeister can be reached on 571-272-1722. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bradley K Smith
Primary Examiner
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